SAFETY

The LanMaster 20 has internal circuit protection to prevent damage if plugged into typical telephone circuits. The protection circuit can withstand 48Vdc from a source impedance of 600 ohms for 15 seconds. When connected to an unknown RJ-45 port and testing shows a "NO LINK" condition, the unit should be disconnected within 15 seconds.

WARRANTY

Psiber Data Systems Inc. warrants that the product shall be free from defects in parts or workmanship for a period of 12 months from the date of purchase if used in accordance with Psiber Data Systems Inc. operating specifications.

THIS IS THE ONLY WARRANTY MADE BY Psiber Data Systems Inc. AND IS EXPRESSLY MADE IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

Should any parts or workmanship prove defective, Psiber Data Systems Inc. will repair or replace at Psiber Data Systems' option, at no cost to the Buyer except for shipping costs from the Buyer's location to Psiber Data Systems Inc. This is Buyer's **SOLE AND EXCLUSIVE REMEDY** under this Agreement.

This warranty does not apply to products which have been subject to neglect, accident or improper use, or to units which have been altered or repaired by other than a Psiber Data Systems Inc. authorized repair facility.

Return of Equipment - To return a product to Psiber Data Systems Inc., first obtain a Return Authorization number from our Customer Service by calling 619-287-9970. The RA# must be clearly marked on the shipping label, or the package will not be accepted by Psiber Data Systems Inc. See sample label below.

To: Psiber Data Sytems Inc.
7075-K Mission Gorge Road
San Diego, CA 92120

RA# XXXXXXXX

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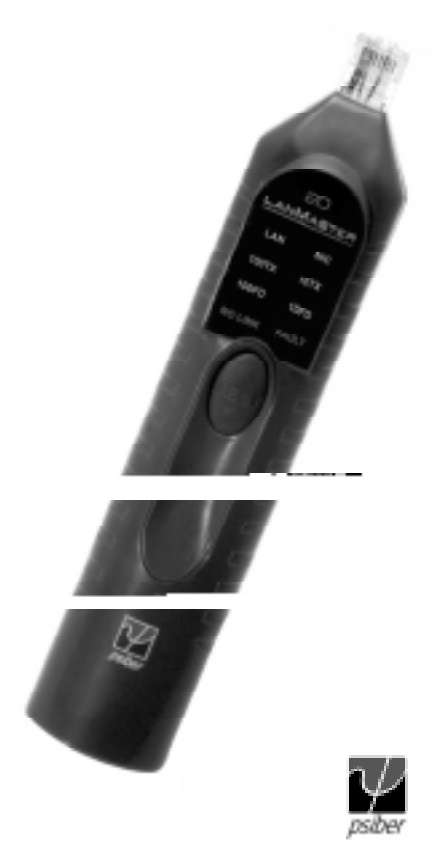
Part No. 1005-0000-0002 Rev B

LANMASTER 20
USER'S GUIDE



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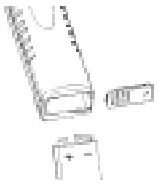
BOX CONTENTS

- LanMaster 20 Link Tester
- 9 Volt Alkaline Battery
- RJ-45 Coupler
- User Guide

BATTERY

The LanMaster 20 operates on one 9 volt alkaline battery. Remove the battery cover at the bottom of the unit and insert the battery with the terminal orientation as shown. Battery polarity is marked on the back of the battery cover and inside the battery well for reference.



TECHNICAL OVERVIEW

The IEEE 802.3u Standard for 100baseTX (Fast Ethernet) requires LAN equipment to use a signaling system to establish a Link between two devices called Link Partners. Standard Ethernet uses a single Normal Link Pulse to establish the Link. Fast Ethernet equipment (and some recent 10baseT products) use a burst of Fast Link Pulses(FLPs) to transmit a Link Code Word defining the configured capabilities of the device and to report faults . If both Link Partners have Auto-negotiation capability, a Link is established based on the following priority:

1. 100baseTX Full Duplex
2. 100baseT4
3. 100baseTX Half Duplex
4. 10baseT Full Duplex
5. 10baseT Half Duplex

The IEEE 802.3u Standard does *not* require Fast Ethernet equipment to support Auto-negotiation or more than one 100baseT mode of operation. New and installed equipment can have different levels of support for Fast Ethernet features. Additionally, these features can be manually configured during installation or operation. The LanMaster 20 detects and decodes the Link signals on Standard and Fast Ethernet networks and displays the equipment configuration and reported faults. The LanMaster 20 does not test 100baseT4.

OPERATION

Insert the LanMaster plug end in to the RJ-45 port of a hub, switch, network interface card, wall outlet, or attach to a UTP or STP cable with the RJ-45 coupler and press the “TEST” button. Wire pair 3,6 (Link signals from the network) is scanned for two seconds. If Link signals are detected, the indicator(s) for the operational modes or fault condition are illuminated and testing is complete. When no signals are detected on the first wire pair, the unit scans wire pair 1,2 (Link signals from the node) for two seconds. Link signals are decoded and the indicator(s) for the modes or fault are lit. If no signals are detected, “NO LINK” is illuminated.

When two or more operational mode indicators are activated, the Link being tested is capable of Auto-negotiating to the